



US006363745B1

**(12) United States Patent
Greeff****(10) Patent No.: US 6,363,745 B1
(45) Date of Patent: *Apr. 2, 2002****(54) CUT CORNERED SQUARE MIXED-CUT
GEMSTONE****(75) Inventor: Robert S. Greeff, Norwalk, CT (US)****(73) Assignee: Tiffany and Company, New York, NY
(US)****(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 09/373,904**(22) Filed: Aug. 12, 1999****Related U.S. Application Data****(63)** Continuation of application No. 09/203,118, filed on Dec. 1, 1998, now Pat. No. 5,970,744.**(51) Int. Cl.⁷ A44C 17/00****(52) U.S. Cl. 63/32; D11/89; D11/90****(58) Field of Search 63/32; D11/89,
D11/90****(56) References Cited****U.S. PATENT DOCUMENTS**

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(57) ABSTRACT

A cut cornered mixed-cut square gemstone comprises a step-cut crown, with two steps and a table, a girdle and a pavilion. The crown and pavilion are substantially square with four equal sides, and corners about $\frac{1}{3}$ the length of the sides. The pavilion sides and corners are defined by eight rib lines which extend substantially continuously from the girdle to a culet. Each pavilion side and corner has four facets, including a lower girdle star facet, two lower girdle facets and a lower bezel facet. The gemstone has the classic elegance of a step cut in the crown and attempts to achieve the good dispersion of a brilliant cut in the pavilion.

15 Claims, 7 Drawing Sheets